10000107.**10/e0881**07

JC13 Rec'd PCT/PTO 2 2 MAR 2002

**PATENT** 

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Hisakazu TANAKA et al.

Serial No.: Not Yet Assigned

(§ 371 of international application No. PCT/JP/01/06428)

Filed: March 22, 2002

For: WATER ABSORBENT MATERIAL AND ABSORBENT ARTICLE

**USING THE SAME** 

**PRELIMINARY AMENDMENT** 

Commissioner for Patents Washington, D.C. 20231

March 22, 2002

Sir:

Prior to the calculation of the filing fees of the above application, please amend the application as follows:

IN THE SPECIFICATION:

Please replace the paragraph beginning at page 2, line 13, with the following rewritten paragraph:

Furthermore, in order to solve the problems described above, water absorbent materials comprising a copolymer of either a sulfoalkyl (meth)acrylate or an acrylamide (Japanese Unexamined Patent Application, First Publication, No. Hei 10-81714) or a copolymer of a nonionic monomer and acrylic acid (Japanese Unexamined Patent Application, First Publication, No. Hei 9-143210) have also been proposed. However, although these water absorbent materials offer an improved water absorption of water which contains salts, the water absorption for pure water or water with only small amounts of ions actually decreases, and the initial water absorption speed is also slow.

Docket No. 020307

Please replace the paragraph beginning at page 14, line 25, with the following rewritten paragraph:

The method of adding the polymerizable anhydropolyamino acid (A) is not specifically limited, but includes, for example, (1) a method of previously mixing an aqueous solution of a previously hydrolyzed polymerizable anhydropolyamino acid (A) with an aqueous solution of a sulfonic acid group-containing polymerizable monomer, (2) a method of simultaneously pouring an aqueous solution of a sulfonic acid group-containing polymerizable monomer, (3) a method of pouring during temperature rise, or (4) a method of pouring after the polymerization was initiated by heat generation. Among these methods, the method (4) is preferred because it can maintain the stability of the system more satisfactorily.

Please replace Table 5 at page 37 with the following rewritten Table 5:

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to to be observed (2)	Components to be charged (g)	Polysuccinimide (2)	GMA	NaOH	Ion exchange water	Sucrose ester F-160 (HLB=16)	Cyclohexane	Sucrose ester F-90 (HLB=9)	Cyclohexane	Na sulfomethyl methacrylate	AMPS	Acrylamide	NaOH	Ion exchange water	MBAA	APS	GMA	APS	Ion exchange water
7.000000	Example 0	3	0.3	1.2	3.2	0.75	20	0.75	164	18.4	1	18.4	•	6.08	0.0039	0.05	1		ŧ
7 01000010	Example /	3	0.3	1.2	3.2	0.75	20	0.75	164	1	16.5	18.4	1.9	76.5	0.0039	0.05	ŧ		1
0 0 1 2 2 2 2	Evanipie o	3	0.3	1.2	3.2	0.75	20	0.75	164	1	16.5	18.4	1.9	76.5	0.0039	0.05	60:0	0.09	2.1
Comp.	Example 3	1		1	1	1		E E		18.4	16.5	18.4	5	6.08	0.0039	0.05	ı	1	1
Comp.	Example 4	1	å	t			20	1	,	4	•	18.4	8.3	76.5	0.0039	0.05	1	•	1

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## REMARKS

The above amendment is believed to correct typographical errors in the specification. Early and favorable action is awaited.

Attached hereto is a marked-up version of the changes made to the specification by the current amendment. The attached page is captioned "Version with markings to show changes made."

In the event there are any additional fees required, please charge our Deposit Account No. 01-2340.

Respectfully submitted,

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Atty. Docket No. 020307

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SGA/yap

Reg. No. 32,878

Docket No. 020307

## VERSION WITH MARKINGS TO SHOW CHANGES MADE

## IN THE SPECIFICATION:

The paragraph beginning at page 2, line 13, has been amended as follows:

Furthermore, in order to solve the problems described above, water absorbent materials comprising a copolymer of either a sulfoalkyl (meth)acrylate or an acrylamide (Japanese Unexamined Patent Application, First Publication, No. Hei [10-871714] 10-81714) or a copolymer of a nonionic monomer and acrylic acid (Japanese Unexamined Patent Application, First Publication, No. Hei 9-143210) have also been proposed. However, although these water absorbent materials offer an improved water absorption of water which contains salts, the water absorption for pure water or water with only small amounts of ions actually decreases, and the initial water absorption speed is also slow.

The paragraph beginning at page 14, line 25, has been amended as follows:

The method of adding the polymerizable anhydropolyamino acid (A) is not specifically limited, but includes, for example, (1) a method of previously mixing an aqueous solution of a previously hydrolyzed polymerizable anhydropolyamino acid (A) with an aqueous solution of a sulfonic acid group-containing polymerizable monomer, [(B)] (2) a method of simultaneously pouring an aqueous solution of a sulfonic acid group-containing polymerizable monomer [(B)], (3)

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a method of pouring during temperature rise, or (4) a method of pouring after the polymerization was initiated by heat generation. Among these methods, the method (4) is preferred because it can maintain the stability of the system more satisfactorily.

The Table 5 at page 37 has been amended as follows:

Table 5

Comp.	Example 4			•	•	1	20	1		•	•	18.4	8.3	76.5	0.00039	1		ſ	ı
Comp.	Example 3	ı			1	1	1			18.4	16.5	18.4		6.08	0.00039			•	5
Type 8	Lyanipic o	m	0.3	1.2	3.2	0.75	20	0.75	164	•	16.5	18.4	1.9	76.5	0.00039	0.05	60.0	60.0	2.1
Evample 7	ראמוויטוכ	3	0.3	1.2	3.2	0.75	20	0.75	164	f	16.5	18.4	1.9	76.5	0.00039	0.05	1		ſ
Evamule 6	ryambic o	3	0.3	1.2	3.2	0.75	20	0.75	164	18.4	,	18.4	•	6.08	0.00039	0.05	•	•	ı
Commonents to be charged (a)		Polysuccinimide (2)	GMA	NaOH	Ion exchange water	Sucrose ester F-160 (HLB=16)	Cyclohexane	Sucrose ester F-90 (HLB=9)	Cyclohexane	Na sulfomethyl methacrylate	AMPS	Acrylamide	NaOH	Ion exchange water	MBAA	APS	GMA	APS	lon exchange water
	5			(3) First sten								(3) Second step			l		(3) Third step		